approximately 3-6 months after giving birth. For North Carolina PRAMS sampling, live births are stratified on birthweight, with oversampling occurring among low birthweight (1,500-2,499 g) and very low birthweight (<1,500 g) births. Excluded from the sampling frame are births to North Carolina residents that took place out of state, those where the birth certificate did not contain the mother's last name, multiple gestations of four or more births, and births to mothers under the age of 13. Data collection began in North Carolina on July 1, 1997, providing us with six months of data for 1997. Since 1997, PRAMS data have been collected every year.

All women in the selected sample are mailed an introductory letter describing the study. Next they are mailed a copy of the NC PRAMS survey instrument. Nonrespondents are then mailed up to two more surveys. Women who do not respond to any of the mailings are contacted by telephone and are asked to complete the survey via telephone. There were a total of 519,095 live births in North Carolina between July 1, 1997 and December 31, 2001. During this period, 10,812 women were included in the PRAMS sample, with 7,935 responding (overall response rate approximately 73 percent). The sample used for most of the analyses in this study is 2,101 women who had a live birth in the 1997-2001 period and reported that they smoked before pregnancy.

Measures of Smoking

Women reported average daily cigarette smoking during the three months before pregnancy, during the last three months before delivery, and at the time of the survey. Therefore, the questions regarding smoking before and during pregnancy are retrospective. Mothers who smoked before pregnancy and smoked at least one cigarette a day during the last three months of pregnancy are defined as persistent smokers, and those who smoked before pregnancy and did not smoke at least one cigarette a day during the last three months of pregnancy are defined as quitters in this study.

Analysis

The data were analyzed with the SUDAAN[17] software to take the complex survey sampling methods into account. The percentages shown are weighted percentages, designed to reflect the entire population of North Carolina women having a live birth. The 95

percent confidence intervals for the percentages, calculated by SUDAAN, are also shown. This is the range within which we would expect the "true" population percentage to fall 95 percent of the time. As an approximation, if the confidence intervals of groups being compared do not overlap, then the difference is statistically significant at the $p<.05$ level. Multivariate logistic regression was used to identify independent correlates of smoking cessation.

Results

Maternal Characteristics

An examination of the sociodemographic characteristics of the women in the entire 1997-2001 PRAMS sample revealed that the majority were White Non-Hispanic (60%), married (65%), and had a high school education or less (55%). The women ranged from 13 to 48 years of age (mean = 26 years). Forty-nine percent of women had their delivery paid for by Medicaid, 44 percent had prenatal care paid for by Medicaid, and 13 percent of the mothers were on Medicaid before their pregnancy.

Smoking Prevalence

The percentages of women who smoked before, during, and after pregnancy are shown in Figure 1. The three pregnancy periods show similar trends over time, i.e., the prevalence of reported smoking has decreased. However, the prevalence of self-reported smoking does differ substantially for the pregnancy periods (before, during, and after pregnancy). Overall (1997-2001), 24.6 percent of women reported smoking before pregnancy, 13.8 percent during pregnancy, and 20.3 percent after

Figure 1. Self-Reported Smoking Prevalence Before, During, and After Pregnancy by Year. NC PRAMS, 1997-2001